What is claimed is:

1. A flat display comprising:

a substrate;

a field emission type electron-emitting source mounted on said substrate;

a front glass member opposing said substrate through a vacuum space and having light transmittance at least partially;

an electron extracting electrode with an electron passing hole and set away from said electron-emitting source to oppose said substrate; and

a phosphor film formed on a surface of said front glass member which opposes said substrate,

said electron-emitting source comprising

a plate-like metal member with a large number of through holes and serving as a growth nucleus for nanotube fibers, and

a coating film formed of nanotubes that cover a surface of said metal member and inner walls of the through holes.

2. A display according to claim 1, wherein

said electron-emitting source comprises a plurality of band-like electron-emitting sources arranged parallel to each other,

said electron extracting electrode comprises a

plurality of band-like extracting electrodes arranged in a direction perpendicular to said band-like electron-emitting sources, and

said phosphor film comprises a plurality of band-like phosphor films arranged to oppose said band-like extracting electrodes.

3. A display according to claim 2, wherein

said display further comprises a plurality of support ribs vertically standing on said substrate at a predetermined interval,

said band-like electron-emitting sources are arranged among said support ribs, and

said band-like electron extracting electrodes are supported on said support ribs.

4. A display according to claim 1, wherein said electron-emitting source is fixed to said substrate with an adhesive containing frit glass.

5. A display according to claim 1, wherein

said metal member of said electron-emitting source is made of one of iron and an iron-containing alloy, and

the nanotubes constituting said coating film are made of carbon and adapted to cover said metal member in a curled state.

6. A display according to claim 5, wherein the nanotube fibers constituting said coating film are fibers each with a thickness of not less than 10 nm and less than 1 and a length of not less than 1 and less than 100 .

7. A display according to claim 5, wherein

said metal member has a thickness of 0.05 mm to 0.20 mm, and

said coating film covers the surface of said metal member and the inner walls of the through holes to a thickness of 10 to 30 to form a smooth curved surface.

8. A display according to claim 1, wherein said metal member has the through holes in a matrix shape to form a grid.

9. A method of mounting a field emission type electron-emitting source, comprising the steps of:

fabricating a metal substrate, integrally having a plurality of band-like plate-like metal members formed of metal plates arranged parallel to each other at a predetermined interval and with a large number of through holes to serve as a growth nucleus for nanotubes and a pair of holding members opposing each other

through the band-like plate-like metal members and adapted to hold two ends of each of the band-like plate-like metal members,

forming a coating film, formed of nanotube fibers, on a surface of the metal substrate and inner walls of the through holes,

adhering the band-like metal members to a surface of a glass substrate, with a tensile force being applied to the metal substrate formed with the coating film, between the holding members, and

separating the holding members away from the metal substrate, and unloading a glass substrate on which a field emission type electron-emitting source has been mounted.

10. A method according to claim 9, wherein the step of adhering comprises the step of adhering the band-like metal members on the glass substrate while plate-like metal attaching metal fixtures, to which two ends of the metal substrate are fixed, are heated to 400℃ to 600℃.